REGISTRATION INFORMATION

FOR MUSEUM EXPLORATIONS

REGISTER BY PHONE:

1. Decide which Exploration topic you want. (Teachers may register for unlimited visits to the museum. However, only **ONE** topic is available per visit.)

Atoms and Elements
Cryogenics
The Human Brain
Incredible Insects
Invisible Energy
Quarantine!
Static Electricity

2. Suggest at least two possible dates for your visit. Demonstrations are available during regular Museum hours. Even if you are not requesting a demonstration, please call to schedule your visit so the Museum staff can expect you.

3. Call the Museum and talk with one of the science educators at 505-606-1492 (Monday-Friday, 8 AM–5 PM.) Please be prepared to give the following information:

- Name and phone number of teacher in charge
- Name and address of your school
- Number of students
- Grade level of students
- Number of chaperones (at least 1 per 6 students)
- Dates requested (suggest at least two)
- Exploration topic and activities requested

If you don't reach us and need to leave a message, please leave your name, best phone number to reach you, and best time to reach you.

After you register by phone, you will receive a written confirmation packet in the mail, including maps, directions, and Museum policies.

FOR SCIENCE ON WHEELS

REGISTER BY MAIL:

Please read carefully the Science on Wheels registration information at the bottom of the previous page as well as on the enclosed application form.

- Fill out the enclosed red application form and mail it back to the Museum before SEPTEMBER 15. All applications **MUST BE RECEIVED** by SEPTEMBER 15.

- In the event that we receive more applications than we have available dates, applications will be drawn randomly to select the school groups that will receive a Science on Wheels visit.

- The MORE FLEXIBLE you can be about the dates you request, the more likely you are to receive a Science on Wheels visit. However, be careful to exclude any school holidays, testing periods, etc., since rescheduling is difficult.

- Letters telling you the status of your application will be mailed the week of September 18.

- If your application is drawn, you will get a confirmation packet telling you which date and program you received. You **MUST** call or email us (505-606-1492 or edu-bsm@lanl.gov) to confirm your reservation no later than SEPTEMBER 29.

- Please send back the schedule for the Science on Wheels visit to us before SEPTEMBER 29. We **MUST** have the schedule before our visit.

- If your application is not drawn, you will get a letter telling you that you are on our waiting list. As cancellations occur, we will substitute applications from the waiting list.

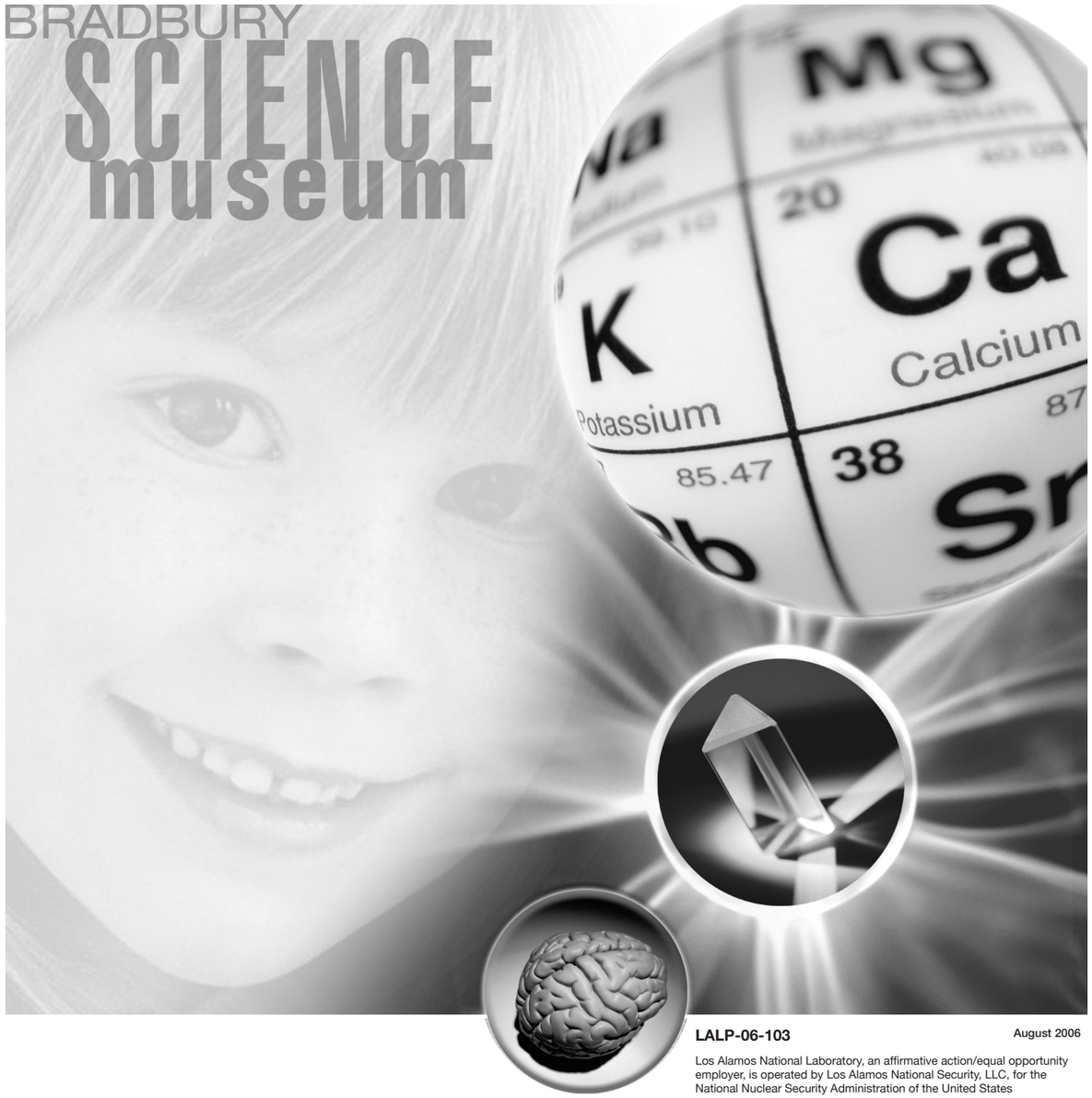
While you're planning a visit to Los Alamos, call ahead to schedule other activities in the area.

- **Learn more about World War II history** .....Los Alamos Historical Museum, 505-662-6272
- **Swim in an Olympic-size pool** .....Larry Walkup Aquatic Center, 505-662-8170
- **Visit ancient cliff dwellings**.....Bandelier National Monument, 505-672-0343
- **Ice skate in the canyon** .....Los Alamos Ice Rink (November to March), 505-662-4500
- **See local exhibitions**.....Art Center at Fuller Lodge, 505-662-9331
- **Eat lunch** .....Picnic tables are available within walking distance at Ashley Pond.

All education programs are aligned with New Mexico state science content standards.
Activities are adjusted appropriately to age level of students!
Please see our website for additional information or contact us.

www.lanl.gov/museum **edu-bsm@lanl.gov** **505-606-1492**

BRADBURY
SCIENCE museum



LALP-06-103 August 2006

2006–2007 School Programs

Los Alamos
NATIONAL LABORATORY
EST.1943

Bradbury Science Museum
Community Programs Office
Mailstop C330
Los Alamos, New Mexico 87544

Come to us for *Museum Explorations*

Enjoy a two-hour customized visit at the Bradbury Science Museum. Choose an Exploration topic from the programs listed below. Contact us to arrange a date for your visit and to discuss which of the following options will best meet your students' interests and needs:

- One science demonstration by the Museum staff
- Hands-on activities related to your chosen topic
- Educational science video related to your chosen topic
- Gallery Quest activity to learn about the history and science of Los Alamos National Laboratory
- Historical video about Los Alamos and the Manhattan Project

Museum Exploration programs

Cryogenics
This is one really cool demonstration! We use liquid nitrogen to show the effects of extreme cold on three states of matter: solids, liquids, and gases. Students will get a bang out of the ending of this demo.

Static Electricity
Students will have a shocking good time at this demonstration! We use simple materials to demonstrate properties of static electricity. Then, with a Van de Graaff generator, we illustrate various static phenomena, including the popular hair-raising experience.

Quarantine!
"Expose" your students to the world of germs and how they cause disease. Learn how germs spread and how we can stop them. *(Note: No real pathogens are used in this demonstration.)*

NEW! Incredible Insects
How does an insect protect itself? How do insects see the world around them? Your young entomologists will identify insects and explore some of the characteristics that make these creatures incredible!

(Note: There are no live insects in this class.)

Radiation
Explore the world of ionizing radiation! Students will learn the nature and effects of alpha, beta, and gamma radiation, the concepts of half-life, and the differences between subcritical, critical, and supercritical reactions.

Atoms and Elements
Come join us at the Periodic Table! Students will learn about the parts of atoms and the properties of matter, and they might even get to meet Dr. Mendeleev!

The Human Brain*
This one will get you thinking, so BYOB: Bring Your Own Brain! Learn about the functions and structures of our brains. Older students will see a real human brain as a model. Learn about brain-mapping techniques developed at Los Alamos National Laboratory.

* Some cultures may be sensitive to this demo. Please be aware of your students' concerns.

OR... *Science on Wheels* will come to your school!

Science on Wheels programs

Galaxy to Go
Bring the universe to your school! This portable, inflatable dome allows your students to explore the wonders of the night sky in a planetarium.

Special requirements: We will need a room with electricity that is 25 feet by 25 feet and AT LEAST 12 feet high with no hanging light fixtures, etc., below 12 feet.

Ready, Set, GO!
Take your students on a fascinating ride as they investigate Newton's laws of motion, inertia, force, reaction, and gravity.

Get Energized!
Energy takes many forms. Help your students discover their potential while experimenting with energy transformation using a variety of toys. This one is a blast!

Volts & Jolts
Charge up your students with hands-on, static-electricity activities. A Van de Graaff generator provides a shocking finale to this class. ZAP!

Special requirements: We will need a classroom with electricity that can be darkened.

Circuit Connection
Make connections with your students! They will find out about the flow of electrons as they assemble simple circuits with batteries, wires, and light bulbs.

Polymer Lab
Mix up some fun with your students. We introduce them to the concept of polymers and then use chemical reactions to make a polymer. Further experiments test polymer properties.

Science of Sight
How do eyes work? Looking at the form and function of eyes, discover how the eyes and the brain work together to process information. Your students will see their eyes in a whole new way!

Micro World
Your students will sharpen their powers of observation using many different scientific tools, including microscopes. Older students will also examine different kinds of cells.

Special requirements: We will need tables and electricity.

Let's Rock
What can a rock tell us? Turn your students into rock hounds. Students learn about our dynamic planet and its rock cycle. They will also classify rock specimens using flash scopes and explore our traveling rock museum.

- Programs are available Monday, Tuesday, and Thursday, October through May, excluding holidays.
- Science on Wheels travels to schools within a 90-minute drive of the Bradbury Science Museum. For locations 60-90 minutes from Los Alamos, the program cannot start before 9:00 AM.
- We will bring the same 50-minute program to a minimum of four and a maximum of six classes to your school in one day.
- All programs require ONE location for the presentation, such as one teacher's classroom, the gym, the library, etc. Each class of students will rotate through this one location for the day.
- There must be NO other activities scheduled in this room during the Science on Wheels program.
- Each class is 50 minutes long with a 10-minute break between classes to reset the equipment.
- The program is designed for 24 students per class. If you have classes of more than 24 students, please contact us to discuss the arrangements for the program. PLEASE DON'T COMBINE CLASSES TO MAKE MORE THAN 24 STUDENTS.
- The classroom teacher MUST BE PRESENT at ALL times during the program.